

WHAT IS CLAIMED IS:

1. A method for displaying attitude, heading, and navigation data on a single display comprising:

configuring the display with terrain data;

overlaying a portion of the terrain display with a compass rose display;

5 and

superimposing an attitude direction indicator with the compass rose display, the attitude direction indicator referenced to a center of the compass rose.

2. A method according to Claim 1 further comprising overlaying a portion of the terrain display with an airspeed indicator.

10 3. A method according to Claim 1 further comprising overlaying a portion of the terrain display with at least one of an altitude indicator and a vertical speed indicator.

15 4. A method according to Claim 1 further comprising displacing the attitude direction indication from a center of the compass rose to indicate an amount of deflection in the pitch and roll axes.

5. A method according to Claim 1 further comprising overlaying a portion of the terrain display with at least one of a course deviation indication, a current ground track, a proposed ground track, and landmark and obstacle data.

20 6. A unit for displaying a navigational display, said unit configured to display a terrain, overlay a portion of the terrain display with a compass rose, and superimpose an attitude direction indicator with the compass rose, the attitude direction indicator referenced to a center of the compass rose.

25 7. A unit according to Claim 6 wherein said unit is further configured to overlay at least one of an airspeed indication and an altitude indication over a portion of the terrain display.

8. A unit according to Claim 6 wherein said terrain display comprises a top-down view onto a three dimensional section of terrain.

9. A unit according to Claim 6 wherein said attitude direction indicator comprises an attitude indicator that is at least one of translucent and circular.

5 10. A unit according to Claim 6 wherein a displacement of the attitude direction indication from a center of said compass rose indicates an amount of deflection in the pitch and roll axes.

10 11. A unit according to Claim 6 wherein said unit is further configured to display at least one of a course deviation indication, a current ground track, a proposed ground track, and landmark and obstacle data.

12. A unit according to Claim 11 wherein said landmark and obstacle data comprises data relating to at least one of airports and runways.

13. A visual display format for a navigational system comprising:

a terrain display;

15 a compass rose overlaying a portion of said terrain display; and

an attitude direction indicator superimposed with said compass rose, said attitude direction indicator referenced to a center of said compass rose.

20 14. A visual display format according to Claim 13 wherein said unit is further configured to overlay at least one of an airspeed indication and an altitude indication over a portion of the terrain display.

15. A visual display format according to Claim 13 wherein said terrain display comprises a top-down onto a three dimensional section of terrain display.

25 16. A visual display format according to Claim 13 wherein said attitude direction indicator comprises a translucent, circular attitude indicator.

17. A visual display format according to Claim 13 wherein a displacement of the attitude direction indication from a center of said compass rose indicates an amount of deflection in the pitch and roll axes.

18. A visual display format according to Claim 13 further comprising at least one of a course deviation indication, a current ground track, a proposed ground track, and landmark and obstacle data.

19. A visual display format according to Claim 18 wherein said landmark and obstacle data comprises data relating to at least one of airports and runways.

20. A display control device, comprising:  
a processor structured for receiving terrain awareness information and samples of current heading and attitude; and

one or more algorithms resident on said processor for generating, as a function of the current heading and attitude, one or more display control signals for causing a display device to display a portion of the terrain awareness information, information relating to heading and attitude.

21. The display control device of claim 20 wherein said processor receives samples relating to at least one of airspeed and altitude, said one or more algorithms resident on said processor one or more display controls for causing a display device to display at least one of an airspeed and an altitude.

22. The display control device of claim 20 wherein said processor receives samples relating to at least one of course deviation, current and proposed ground track, and landmark data, said one or more algorithms resident on said processor one or more display controls for causing a display device to display at least one of a course deviation indicator, a current and a proposed ground track, and landmark data.